


DNA base sequencer

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Inventor(s): MISHINA YOSHINORI (JP); MACHIDA HIROAKI (JP); TAKAGI SHINICHI (JP);
MIYAZAKI YUUSUKE (JP)
Applicant(s):: HITACHI ELECTR ENG (JP)
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Abstract

The improved DNA base sequencer comprising an electrophoresis plate (74) having a gel electrolyte layer (90) held between two glass plates (86, 88), one of which is partially cut away on the top edge in the direction of width, an assay compartment (22) for accommodating said electrophoresis plate in a vertically erect position, a lower reservoir (30) of a buffer solution in which the lower part of the gel electrolyte layer in the electrophoresis plate is to be immersed, an upper reservoir (28) of a buffer solution in which the upper part of said electrolyte layer is to be immersed, photoexciting laser light applying means (70) by which laser light is emitted from a lateral side of the electrophoresis plate in such a way that it crosses the lanes in said plate at right angles, and fluorescence detecting means (84) by which the fluorescence emitted from a DNA fragment illuminated with the laser light is picked up and converted to an electric signal, wherein a sharktoothcomb (1) made of a water-swellable material is inserted from the top edge of said electrophoresis plate (74) into the space between the two glass plates, either the top or bottom edge of said sharktoothcomb being provided with a plurality of teeth (3) which are each tapered from the root toward the tip. 

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